

House File 2302 - Introduced

HOUSE FILE 2302
BY COMMITTEE ON INFORMATION
TECHNOLOGY

(SUCCESSOR TO HSB 555)

A BILL FOR

- 1 An Act relating to affirmative defenses for entities using
- 2 cybersecurity programs.
- 3 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

1 Section 1. Section 554D.103, subsections 4, 5, 8, 9, and 16,
2 Code 2022, are amended to read as follows:

3 4. "*Contract*" means the total legal obligation resulting
4 from the parties' agreement as affected by **this chapter** and
5 other applicable law. ~~"Contract" includes any contract secured
6 through distributed ledger technology and a smart contract.~~

7 5. ~~"Distributed ledger technology" means an electronic
8 record of transactions or other data to which all of the
9 following apply:~~

10 a. ~~The electronic record is uniformly ordered.~~

11 b. ~~The electronic record is redundantly maintained or
12 processed by one or more computers or machines to guarantee the
13 consistency or nonrepudiation of the recorded transactions or
14 other data.~~

15 8. "*Electronic record*" means a record created, generated,
16 sent, communicated, received, or stored by electronic means.
17 ~~"Electronic record" includes any record secured through
18 distributed ledger technology.~~

19 9. "*Electronic signature*" means an electronic sound, symbol,
20 or process attached to or logically associated with a record
21 and executed or adopted by a person with the intent to sign the
22 record. ~~"Electronic signature" includes a signature that is
23 secured through distributed ledger technology.~~

24 16. ~~"Smart contract" means an event-driven program or
25 computerized transaction protocol that runs on a distributed,
26 decentralized, shared, and replicated ledger that executes the
27 terms of a contract. For purposes of **this subsection**, "executes
28 the terms of a contract" may include taking custody over and
29 instructing the transfer of assets.~~

30 Sec. 2. Section 554D.108, subsection 2, Code 2022, is
31 amended to read as follows:

32 2. A contract shall not be denied legal effect or
33 enforceability solely because an electronic record was used in
34 its formation ~~or because the contract is a smart contract or
35 contains a smart contract provision.~~

1 Sec. 3. NEW SECTION. **554E.1 Definitions.**

2 As used in this chapter:

3 1. "*Account*" means the same as defined in section 554.9102.

4 2. "*Business*" means any limited liability company, limited
5 liability partnership, corporation, sole proprietorship,
6 association, or other group, however organized and whether
7 operating for profit or not for profit, including a financial
8 institution organized, chartered, or holding a license
9 authorizing operation under the laws of this state, any other
10 state, the United States, or any other country, or the parent
11 or subsidiary of any of the foregoing.

12 3. "*Contract*" means the same as defined in section 554D.103.

13 4. "*Covered entity*" means a business that accesses,
14 receives, stores, maintains, communicates, or processes
15 personal information or restricted information in or through
16 one or more systems, networks, or services located in or
17 outside this state.

18 5. "*Data breach*" means an intentional or unintentional
19 action that could result in electronic records owned, licensed
20 to, or otherwise protected by a covered entity being viewed,
21 copied, modified, transmitted, or destroyed in a manner that
22 is reasonably believed to have or may cause material risk of
23 identity theft, fraud, or other injury or damage to person or
24 property. "*Data breach*" does not include any of the following:

25 *a.* Good-faith acquisition of personal information or
26 restricted information by the covered entity's employee or
27 agent for the purposes of the covered entity, provided that
28 the personal information or restricted information is not used
29 for an unlawful purpose or subject to further unauthorized
30 disclosure.

31 *b.* Acquisition or disclosure of personal information or
32 restricted information pursuant to a search warrant, subpoena,
33 or other court order, or pursuant to a subpoena, order, or duty
34 of a regulatory state agency.

35 6. "*Distributed ledger technology*" means an electronic

1 record of transactions or other data to which all of the
2 following apply:

3 *a.* The electronic record is uniformly ordered.

4 *b.* The electronic record is redundantly maintained or
5 processed by one or more computers or machines to guarantee the
6 consistency or nonrepudiation of the recorded transactions or
7 other data.

8 7. "*Electronic*" means the same as defined in section
9 554D.103.

10 8. "*Electronic record*" means the same as defined in section
11 554D.103.

12 9. "*Encrypted*" means the use of an algorithmic process to
13 transform data into a form for which there is a low probability
14 of assigning meaning without use of a confidential process or
15 key.

16 10. "*Individual*" means a natural person.

17 11. "*Maximum probable loss*" means the greatest damage
18 expectation that could reasonably occur from a data breach.
19 For purposes of this subsection, "*damage expectation*" means the
20 total value of possible damage multiplied by the probability
21 that damage would occur.

22 12. *a.* "*Personal information*" means any information
23 relating to an individual who can be identified, directly or
24 indirectly, in particular by reference to an identifier such
25 as a name, an identification number, social security number,
26 driver's license number or state identification card number,
27 passport number, account number or credit or debit card number,
28 location data, biometric data, an online identifier, or to
29 one or more factors specific to the physical, physiological,
30 genetic, mental, economic, cultural, or social identity of that
31 individual.

32 *b.* "*Personal information*" does not include publicly
33 available information that is lawfully made available to the
34 general public from federal, state, or local government records
35 or any of the following media that are widely distributed:

1 (1) Any news, editorial, or advertising statement published
2 in any bona fide newspaper, journal, or magazine, or broadcast
3 over radio, television, or the internet.

4 (2) Any gathering or furnishing of information or news by
5 any bona fide reporter, correspondent, or news bureau to news
6 media identified in this paragraph.

7 (3) Any publication designed for and distributed to members
8 of any bona fide association or charitable or fraternal
9 nonprofit business.

10 (4) Any type of media similar in nature to any item, entity,
11 or activity identified in this paragraph.

12 13. "Record" means the same as defined in section 554D.103.

13 14. "Redacted" means altered, truncated, or anonymized so
14 that, when applied to personal information, the data can no
15 longer be attributed to a specific individual without the use
16 of additional information.

17 15. "Restricted information" means any information about
18 an individual, other than personal information, or business
19 that, alone or in combination with other information, including
20 personal information, can be used to distinguish or trace the
21 identity of the individual or business, or that is linked or
22 linkable to an individual or business, if the information is
23 not encrypted, redacted, tokenized, or altered by any method or
24 technology in such a manner that the information is anonymized,
25 and the breach of which is likely to result in a material risk
26 of identity theft or other fraud to person or property.

27 16. "Smart contract" means an event-driven program or
28 computerized transaction protocol that runs on a distributed,
29 decentralized, shared, and replicated ledger that executes the
30 terms of a contract. For purposes of this subsection, "executes
31 the terms of a contract" may include taking custody over and
32 instructing the transfer of assets.

33 17. "Transaction" means a sale, trade, exchange, transfer,
34 payment, or conversion of virtual currency or other digital
35 asset or any other property or any other action or set of

1 actions occurring between two or more persons relating to the
2 conduct of business, commercial, or governmental affairs.

3 Sec. 4. NEW SECTION. 554E.2 **Distributed ledger technology**
4 **— ownership of information.**

5 1. A record shall not be denied legal effect or
6 enforceability solely because the record is created, generated,
7 sent, communicated, received, recorded, or stored by means of
8 distributed ledger technology or a smart contract.

9 2. A signature shall not be denied legal effect or
10 enforceability solely because the signature is created,
11 generated, sent, communicated, received, recorded, or stored by
12 means of distributed ledger technology or a smart contract.

13 3. A contract shall not be denied legal effect or
14 enforceability solely for any of the following:

15 a. The contract is created, generated, sent, communicated,
16 received, executed, signed, adopted, recorded, or stored by
17 means of distributed ledger technology or a smart contract.

18 b. The contract contains a smart contract term.

19 c. An electronic record, distributed ledger technology, or
20 smart contract was used in the contract's formation.

21 4. A person who, in engaging in or affecting interstate
22 or foreign commerce, uses distributed ledger technology to
23 secure information that the person owns or has the right to use
24 retains the same rights of ownership or use with respect to
25 such information as before the person secured the information
26 using distributed ledger technology. This subsection does not
27 apply to the use of distributed ledger technology to secure
28 information in connection with a transaction to the extent that
29 the terms of the transaction expressly provide for the transfer
30 of rights of ownership or use with respect to such information.

31 Sec. 5. NEW SECTION. 554E.3 **Affirmative defenses.**

32 1. A covered entity seeking an affirmative defense under
33 this chapter shall create, maintain, and comply with a written
34 cybersecurity program that contains administrative, technical,
35 operational, and physical safeguards for the protection of both

1 personal information and restricted information.

2 2. A covered entity's cybersecurity program shall be
3 designed to do all of the following:

4 a. Continually evaluate and mitigate any reasonably
5 anticipated internal or external threats or hazards that could
6 lead to a data breach.

7 b. Periodically evaluate no less than annually the maximum
8 probable loss attainable from a data breach.

9 c. Communicate to any affected parties the extent of any
10 risk posed and any actions the affected parties could take to
11 reduce any damages if a data breach is known to have occurred.

12 3. The scale and scope of a covered entity's cybersecurity
13 program is appropriate if the cost to operate the cybersecurity
14 program is no less than the covered entity's most recently
15 calculated maximum probable loss value.

16 4. a. A covered entity that satisfies all requirements
17 of this section is entitled to an affirmative defense to any
18 cause of action sounding in tort that is brought under the
19 laws of this state or in the courts of this state and that
20 alleges that the failure to implement reasonable information
21 security controls resulted in a data breach concerning personal
22 information or restricted information.

23 b. A covered entity satisfies all requirements of this
24 section if its cybersecurity program reasonably conforms to an
25 industry-recognized cybersecurity framework, as described in
26 section 554E.4.

27 Sec. 6. NEW SECTION. 554E.4 Cybersecurity program
28 framework.

29 1. A covered entity's cybersecurity program, as
30 described in section 554E.3, reasonably conforms to an
31 industry-recognized cybersecurity framework for purposes of
32 section 554E.3 if any of the following are true:

33 a. (1) The cybersecurity program reasonably conforms to the
34 current version of any of the following or any combination of
35 the following, subject to subparagraph (2) and subsection 2:

1 (a) The framework for improving critical infrastructure
2 cybersecurity developed by the national institute of standards
3 and technology.

4 (b) National institute of standards and technology special
5 publication 800-171.

6 (c) National institute of standards and technology special
7 publications 800-53 and 800-53a.

8 (d) The federal risk and authorization management program
9 security assessment framework.

10 (e) The center for internet security critical security
11 controls for effective cyber defense.

12 (f) The international organization for
13 standardization/international electrotechnical commission 27000
14 family — information security management systems.

15 (2) When a final revision to a framework listed in
16 subparagraph (1) is published, a covered entity whose
17 cybersecurity program reasonably conforms to that framework
18 shall reasonably conform the elements of its cybersecurity
19 program to the revised framework within the time frame provided
20 in the relevant framework upon which the covered entity intends
21 to rely to support its affirmative defense, but in no event
22 later than one year after the publication date stated in the
23 revision.

24 *b.* (1) The covered entity is regulated by the state, by
25 the federal government, or both, or is otherwise subject to
26 the requirements of any of the laws or regulations listed
27 below, and the cybersecurity program reasonably conforms to
28 the entirety of the current version of any of the following,
29 subject to subparagraph (2):

30 (a) The security requirements of the federal Health
31 Insurance Portability and Accountability Act of 1996, as set
32 forth in 45 C.F.R. pt. 164, subpt. C.

33 (b) Title V of the federal Gramm-Leach-Bliley Act of 1999,
34 Pub. L. No. 106-102, as amended.

35 (c) The federal Information Security Modernization Act of

1 2014, Pub. L. No. 113-283.

2 (d) The federal Health Information Technology for Economic
3 and Clinical Health Act as set forth in 45 C.F.R. pt. 162.

4 (2) When a framework listed in subparagraph (1) is amended,
5 a covered entity whose cybersecurity program reasonably
6 conforms to that framework shall reasonably conform the
7 elements of its cybersecurity program to the amended framework
8 within the time frame provided in the relevant framework
9 upon which the covered entity intends to rely to support its
10 affirmative defense, but in no event later than one year after
11 the effective date of the amended framework.

12 c. (1) The cybersecurity program reasonably complies
13 with both the current version of the payment card industry
14 data security standard and conforms to the current version of
15 another applicable industry-recognized cybersecurity framework
16 listed in paragraph "a", subject to subparagraph (2) and
17 subsection 2.

18 (2) When a final revision to the payment card industry
19 data security standard is published, a covered entity whose
20 cybersecurity program reasonably complies with that standard
21 shall reasonably comply the elements of its cybersecurity
22 program with the revised standard within the time frame
23 provided in the relevant framework upon which the covered
24 entity intends to rely to support its affirmative defense, but
25 in no event later than one year after the publication date
26 stated in the revision.

27 2. If a covered entity's cybersecurity program reasonably
28 conforms to a combination of industry-recognized cybersecurity
29 frameworks, or complies with a standard, as in the case of the
30 payment card industry data security standard, as described in
31 subsection 1, paragraph "a" or "c", and two or more of those
32 frameworks are revised, the covered entity whose cybersecurity
33 program reasonably conforms to or complies with, as applicable,
34 those frameworks shall reasonably conform the elements of its
35 cybersecurity program to or comply with, as applicable, all of

1 the revised frameworks within the time frames provided in the
2 relevant frameworks but in no event later than one year after
3 the latest publication date stated in the revisions.

4 Sec. 7. NEW SECTION. 554E.5 Causes of actions.

5 This chapter shall not be construed to provide a private
6 right of action, including a class action, with respect to any
7 act or practice regulated under those sections.

8 Sec. 8. REPEAL. Section 554D.106A, Code 2022, is repealed.

9

EXPLANATION

10 The inclusion of this explanation does not constitute agreement with
11 the explanation's substance by the members of the general assembly.

12 This bill relates to cybersecurity programs, affirmative
13 defenses, and distributed ledger technology.

14 The bill provides that a record or signature shall not be
15 denied legal effect because it is created or stored by means of
16 distributed ledger technology or smart contract, as those terms
17 are defined in the bill. The bill provides in new Code section
18 554E.2 that the ownership of the secure information remains
19 with the person who provided the signature, not the distributed
20 ledger technology owner, and repeals a similar provision in
21 Code section 554D.106A.

22 The bill creates affirmative defenses for entities using
23 cybersecurity programs and provides definitions. The bill
24 provides that a covered entity seeking an affirmative defense
25 must use a cybersecurity program for the protection of personal
26 information and restricted information and the cybersecurity
27 program must reasonably conform to an industry-recognized
28 cybersecurity framework. A cybersecurity program must
29 continually evaluate and mitigate reasonably anticipated
30 threats, periodically evaluate the maximum probable loss
31 attainable from a data breach, and communicate to affected
32 parties the risk posed and actions the affected parties could
33 take to reduce damages if a data breach has occurred. The
34 scale and scope of a cybersecurity program is appropriate if
35 the cost to operate the program is no less than the covered

1 entity's maximum probable loss value. A covered entity that
2 satisfies these requirements and that reasonably conforms to
3 an industry-recognized cybersecurity framework is entitled to
4 an affirmative defense to a tort claim that alleges that the
5 failure to implement reasonable information security controls
6 resulted in a data breach concerning personal information or
7 restricted information.

8 The bill details industry-recognized cybersecurity
9 frameworks that the covered entity may follow and reasonably
10 comply to in order to qualify for the affirmative defense.

11 The bill does not provide a private right to action,
12 including a class action.